

pressure sensitive adhesive polymer. The foams of Walther are produced as sheets, and therefore, inherently have a major longitudinal surface. Because pores are three dimensional, they are inherently perpendicular to at least one side of the sheet of foam in which they are a part. Walther discloses thicknesses between about 76 and about 305 microns, which are within Applicant's presently claimed range. Walther discloses depositing the breathable foam onto a metal surface. This reads on an article having at least two layers, one of the layers being non-porous.

Applicants have amended claims 13 and 34 to include the limitation that the foam layer is formed by extruding a mixture containing at least one blowing agent. Applicants have amended claim 25 and 29 to include the limitation that the A layer or second layer is ruptured at, or near, the sites of ruptured cells in the foam layer. Applicants have also amended claims 13, 25, 29, and 34 to clarify that it is the breathability (as defined in the specification) that is perpendicular to a major surface of the foam.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP 2131 (citing *Verdegaal Bros. V. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

Applicants submit that Walther does not disclose an extruded single layer foam, or a multi-layer foam that is ruptured at, or near, the sites of ruptured cells in the foam layer. Accordingly, the reference does not describe every element of the claimed invention.

Based on the foregoing, Applicant(s) submit that the cited reference cannot support a 35 U.S.C. 102(e) rejection and respectfully requests that the rejection be withdrawn.

35 U.S.C. §103 Obviousness Rejections

According to MPEP 2142, to establish a case of prima facie obviousness, three basic criteria must be met: 1) there must be some suggestion or motivation, either in the references or generally known to one of skill in the art, to modify or combine reference teachings, 2) there must be reasonable expectation of success, and 3) the prior art references must teach or suggest all the claim limitations.

35 U.S.C. 103(a) – Volke (U.S. 4,743,499) and Cilento et al. (U.S. 4,427,737)

Claims 13-17, 25-27, 29, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Volke (U.S. 4,743,499) in view of Cilento (U.S. 4,427,737).

The Office Action refers to the teachings of Volke as set forth in Paper No. 7, pages 3-5.

The Office Action further states, in part, that although Volke does not specifically disclose a breathable foam layer having a thickness of about 86 to 265 microns, Cilento discloses a breathable tape for use in various medical or health care purposes comprised of a porous backing layer and a microporous adhesive layer. The porous backing layer of Cilento may be polyurethane foam having a thickness from about 76.2 to 508 microns. It is known in the art that by decreasing the thickness of a foam sheet the overall flexibility of that foamed sheet will increase. Therefore, it would have been obvious to the skilled artisan at the time this invention was made to combine the teachings of Cilento and Volke, motivated by the desire to produce a wound dressing with increased flexibility.

With regard to amended claim 17, because the foam layer of Volke is flexible, it is inherently capable of stretching. Therefore, the flexible foam layer of Volke would inherently display an increased moisture vapor transition rate upon stretching.

With regard to Claim 34, Volke discloses a foam layer of polyurethane. This reads on Applicant's foam layer comprising a pressure sensitive adhesive polymer.

Applicants disagree with the Examiner's statement that by decreasing the thickness of a foam sheet the overall flexibility of that foamed sheet will increase. In some cases, decreasing the thickness of a foam can weaken the foam, making it less flexible. Applicants also disagree with the Examiner's statement that because a foam layer is flexible, it is inherently capable of stretching. Applicants find no basis for such an assumption because not all flexible materials can be stretched. For example, a sheet of paper is extremely flexible, but is not at all capable of stretching.

Applicants respectfully submit that the references cannot support a case of *prima facie* obviousness as to the amended claims because, among other possible reasons, the cited references do not provide a motivation or suggestion for a single layer extruded foam layer or a multi-layer article with a foam layer and an additional ruptured layer because neither reference teaches a single foam made by extrusion or a multi-layer foam in which an additional layer ruptures at, or near, the site of ruptured cells in the foam layer. Furthermore, there could be no reasonable expectation of success because the references provide no indication of a foam article with the claimed characteristics. In addition, these references do not disclose all the elements of the present invention because they do not disclose extrusion or additional layer rupturing at, or near, the site of ruptured cells in the foam layer.

For these reasons, Applicants submit that the cited references will not support a 103(a) rejection of the claimed invention and request that the rejection be withdrawn.

35 U.S.C. 103(a) – Chen (U.S. 3,972,328) and Cilento et al. (U.S. 4,427,737)

Claims 13-17, 25-28, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (U.S. 3,972,328) in view of Cilento (U.S. 4,427,737).

The Office Action refers to the teachings of Chen and Cilento as set forth in Paper No. 7, pages 5-6. The Office Action further states, in part, that although Chen does not specifically disclose a breathable foam layer having a thickness of about 86 to 265 microns, Cilento discloses a breathable tape comprised of a porous backing layer and a microporous adhesive layer. The porous backing layer of Cilento may be polyurethane foam having a thickness from about 76.2 to 508 microns. It would have been obvious to the skilled artisan at the time this invention was made to combine the teachings of Cilento and Chen, motivated by the desire to produce a surgical bandage with increased flexibility.

With regard to claims 34 and 35, Chen discloses a breathable foam layer comprising styrene-butadiene foams. This reads on Applicant's foam layer comprising a pressure sensitive adhesive polymer, and Applicant's thermoplastic, amorphous polymer consisting of a styrene-butadiene-styrene block copolymer.

Applicants hereby incorporate by reference the same response and arguments submitted in the previous section in response to the 35 USC 103 rejection based on Volke and Cilento.

For the reasons stated above, Applicants submit that the cited references will not support a 103(a) rejection of the claimed invention and request that the rejection be withdrawn.

35 U.S.C. 103(a) – Bello et al. (U.S. 5,716,621) and Cilento et al. (U.S. 4,427,737)

Claims 13-17, 25-27, 31, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bello et al. (U.S. 5,716,621) in view of Cilento (U.S. 4,427,737).

The Office Action refers to the teachings of Bello and Cilento as set forth in Paper No. 7, pages 6-7. The Office Action further states, in part, that although Bello does not specifically disclose a breathable foam layer having a thickness of about 86 to 265 microns, Cilento discloses a breathable tape for use in various medical or health care purposes comprised of a porous backing layer and a microporous adhesive layer. It would have been obvious to the skilled artisan at the time this invention was made to combine the teachings of

Cilento and Bello, motivated by the desire to produce a drug delivery dressing with increased flexibility.

Applicants hereby incorporate by reference the same response and arguments submitted above in response to the 35 USC 103 rejection based on Volke and Cilento.

For the reasons stated above, Applicants submit that the cited references will not support a 103(a) rejection of the claimed invention and request that the rejection be withdrawn.

35 U.S.C. 103(a) – Tenneco Chemicals, Inc. (GB 1321489) and Cilento et al. (U.S. 4,427,737)

Claims 13, 14, 17, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tenneco Chemicals, Inc. (GB 1321489) in view of Cilento (U.S. 4,427,737).

The Office Action refers to the teachings of Tenneco Chemicals and Cilento as set forth in Paper No. 7, pages 8-9. The Office Action further states although Tenneco does not specifically disclose a breathable foam layer having a thickness of about 86 to 265 microns, Cilento discloses a breathable tape for use in various medical or health care purposes comprised of a porous backing layer and a microporous adhesive layer. It would have been obvious to the skilled artisan at the time this invention was made to combine the teachings of Cilento and Tenneco, motivated by the desire to produce a foamed cellular sheet with increased flexibility.

Applicants hereby incorporate by reference the same response and arguments submitted above in response to the 35 USC 103 rejection based on Volke and Cilento.

For the reasons stated above, Applicants submit that the cited references will not support a 103(a) rejection of the claimed invention and request that the rejection be withdrawn.

35 U.S.C. 103(a) – Volke (U.S. 4,743,499); Cilento et al. (U.S. 4,427,737); and Chen (U.S. 3,972,328)

Claims 28, 30, 31, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Volke (U.S. 4,743,499) in view of Cilento et al. (U.S. 4,427,737) as applied to claims 13, 25, and 29 above, and further in view of Chen (U.S. 3,972,328).

The Office Action states, in part, that with regard to Claims 28 and 30, Volke discloses a flexible, open-cell amorphous, thermoplastic foam core, but does not disclose a foam layer comprised of a thermoplastic elastomer. Chen is directed to a surgical bandage whose foam core may be comprised of a semi-open cell styrene-butadiene foam which is an

amorphous, thermoplastic elastomer. It would have been obvious to the skilled artisan at the time the invention was made to combine the teachings of Volke and Chen, motivated by the desire to produce a bandage with a foam core which displays increased cushioning properties.

With regard to Claim 31, neither Volke nor Chen specifically disclose the moisture vapor transmission rate of the polymeric film/foam article. However, Chen does disclose that the polymeric film be somewhat gas permeable. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the moisture vapor transmission rate of the film/foam article.

With regard to Claim 35, Volke does not specifically disclose the use of a thermoplastic, amorphous polymer from Applicant's list. Chen, however, discloses the use of a semi-open cell styrene-butadiene foam which is an amorphous, thermoplastic elastomer. It would have been obvious to the skilled artisan at the time the invention was made to combine the teachings of Volke and Chen, motivated by the desire to produce a bandage with a foam core which displays increased cushioning properties.

Applicants hereby incorporate by reference the same response and arguments submitted above in response to the 35 USC 103 rejection based on Volke and Cilento.

For the reasons stated above, Applicants submit that the cited references will not support a 103(a) rejection of the claimed invention and request that the rejection be withdrawn.

In addition to the foregoing arguments, Applicants submit that a dependent claim should be considered allowable when its parent claim is allowed. *In re McCain*, 101 USPQ 411 (CCPA 1954). Accordingly, provided the independent claims are allowed, all claims depending therefrom should also be allowed.

In view of the above discussion, it is submitted that the claims, as now amended, are in condition for allowance. Withdrawal of the rejections under 35 USC 102 and 103 is requested, and reconsideration and a Notification of Allowability are respectfully solicited. If any questions or issues remain, the Examiner is invited to contact Applicant's attorney if the Examiner believes such questions or issues could be resolved.

Respectfully submitted,

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Version of the claims showing changes made

13. (once amended) An article comprising a breathable foam layer[, the layer comprising] formed by extruding a thermoplastic, amorphous polymer mixed with at least one blowing agent, the foam layer further having at least one major surface, having porosity in a direction perpendicular to a major surface, and having a thickness of about 86 to about 265 microns.

25. (once amended) An article comprising at least two layers wherein at least one layer comprises a breathable, amorphous thermoplastic foam having at least one major surface, having at least one ruptured cell, and having a thickness of about 86 to about 265 microns, and wherein the foam layer has [porosity] breathability in a direction perpendicular to a major surface of the foam, and wherein the second layer comprises a polymeric material that is ruptured at, or near, the site of ruptured cells in the foam layer.

29. (once amended) An article comprising a breathable three layer ABA structure, wherein the B layer is a breathable thermoplastic foam having at least one major surface, having at least one ruptured cell, and having a thickness of about 86 to about 265 microns, and wherein the B layer has [porosity] breathability in a direction perpendicular to a major surface of the foam, and wherein the A layers comprise an unfoamed material that is ruptured at, or near, the site of ruptured cells in the foam layer.

34. (once amended) An article comprising a breathable foam layer[, the foam layer comprising] formed by extruding a pressure sensitive adhesive polymer mixed with at least one blowing agent, the foam layer further having at least one major surface and having [porosity] breathability in a direction perpendicular to a major surface.